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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,667	01/29/2001	Masaaki Kobayashi	35.C15084	7042

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EXAMINER

SONG, HOON K

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 12/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/770,667

Applicant(s)

KOBAYASHI, MASA AKI

Examiner

Hoon K Song

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 10-14, 16-18, 20-22, 24, 25 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 15, 19 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8, 10-14, 16-18, 20-22, 24-25, and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohlson (US 5764724).

Regarding claim 1, Ohlson teaches a radiographic apparatus comprising:

a top plate (1) for supporting a subject;

an image receiver (2) for receiving a radiographic image of the subject;

a moving mechanism (figure 2) for varying the position of the image receiver relative to the top plate and/or posture of the image receiver;

a vertical moving mechanism (1a) for vertically moving the top plate and the image receiver; and

limiting means (1a, 1b, or floor) for limiting the action of the vertical moving mechanism according to the position relative to the top plate and/or posture of the image receiver (the telescoping leg, 1a, is limiting the vertical movement of the top plate so the top plate can not touch the floor).

Regarding claim 2, Ohlson teaches that the moving mechanism comprises a guide mechanism for allowing the image receiver to change in position in the horizontal direction relative to the top plate and/or in posture (figure 20).

Regarding claim 3, Ohlson teaches that the moving mechanism comprises a guide mechanism for guiding the movement of the image receiver in the horizontal direction, between a first position under the top plate and a second position at a side of the top plate (figure 4).

Regarding claim 4, Ohlson teaches that the action of the vertical moving mechanism is limited in case the image receiver is not in the first position (the telescopic leg, 1a, is limited in case the image receiver is in vertical position).

Regarding claim 5, Ohlson teaches that in case the image receiver is in second position, the action of the vertical moving mechanism is limited (described above) in case the image receiver is in a horizontal posture and the action of the vertical moving mechanism is not limited in case the image receiver is in a vertical posture (described above).

Regarding claim 8, Ohlson teaches that an operation member for operating the vertical moving mechanism, wherein the operation member is provided in a position difficult to operate when the image receiver is in a horizontal posture at a side of the top plate (figure 1 and 2).

Regarding claim 10, Ohlson teaches a radiographic apparatus comprising a top plate for supporting a subject;

an image receiver (2) for receiving a radiographic image of the subject;

a moving mechanism (figure 2) for varying the position of the image receiver relative to the top plate and/or posture of the image receiver;

a vertical moving mechanism (1a) for vertically moving the top plate and the image receiver; and

an operation member (1a) for operating the vertical moving mechanism;

wherein the operation member is provided in a position difficult to operate when the image receiver is in a horizontal posture at a side of the top plate (figure 2)

Regarding claim 11, Ohlson teaches that the radiographic image is X-ray image (title).

Regarding claim 12, Ohlson teaches that an X-ray generator for generating X-ray (title).

Regarding claim 13, Ohlson teaches that the image receiver comprises a radiographic film, a photostimulable phosphor sheet or a digital radiographic detector (title).

Regarding claim 14, Ohlson teaches a radiographic apparatus comprising
a top plate movable in the horizontal direction, for supporting a subject;
an image receiver for receiving a radiographic image of the subject;
a moving mechanism for varying the position of the image receiver in the horizontal direction relative to the top plate and the posture of the image receiver (figure 2); and

limiting means (1a) for limiting the movement of the top plate in a predetermined direction in case the posture of the image receiver is not horizontal (the telescopic leg has a vertically limiting position).

Regarding claim 16, Ohlson teaches that the moving mechanism guides the movement of the image receiver in the horizontal direction between a first position below the top plate and a second position at a side of the top plate and also guides switching of the image receiver, in the second position, between a horizontal posture and a vertical posture (figure 1 and 2).

Regarding claim 17, Ohlson teaches that the limiting means (1a) limits the movement of the top plate in the lateral direction.

Regarding claim 18, Ohlson teaches a radiographic apparatus comprising:
a top plate (1) movable in the horizontal direction, for supporting a subject;
an image receiver (2) for receiving a radiographic image of the subject;
a moving mechanism (figure 20) for varying the position of the image receiver in the horizontal direction relative to the top plate and the posture of the image receiver;
and

limiting means (1a) for limiting the change in the posture of the image receiver according to the position of the top plate.

Regarding claim 20, Ohlson teaches that the moving mechanism guides the movement of the image receiver in the horizontal direction between a first position below the top plate and a second position at a side of the top plate and also guides switching of the image receiver, in the second position, between a horizontal posture and a vertical posture (figure 1 and 2).

Regarding claim 21, Ohlson teaches that the limiting means (1a) limits the change of the posture of the image receiver from horizontal to vertical.

Regarding claim 22, Ohlson teaches a radiographic apparatus comprising a top plate movable in the horizontal direction, for supporting a subject;

an image receiver (2) for receiving a radiographic image of the subject;

a moving mechanism (figure 2) for varying the position of the image receiver in the horizontal direction relative to the top plate and the posture of the image receiver; and

limiting means for limiting the movement of the top plate in a predetermined direction (telescopic leg) in case the posture of the image receiver is not horizontal and the top plate is positioned within a predetermined range (telescopic leg).

Regarding claim 24, Ohlson teaches that the moving mechanism guides the movement of the image receiver in the horizontal direction between a first position below the top plate and a second position at a side of the top plate and also guides switching of the image receiver, in the second position, between a horizontal posture and a vertical posture (figure 1 and 2).

Regarding claim 25, Ohlson teaches that the limiting means (1a) limits the movement of the top plate in the lateral direction.

Regarding claim 28, Ohlson teaches that a vertical moving mechanism for vertically moving the top plate and the image receiver (figure 2) .

Regarding claim 29, Ohlson teaches that the radiographic image is X-ray image (title).

Regarding claim 30, Ohlson teaches that an X-ray generator for generating X-ray (title).

Regarding claim 31, Ohlson teaches that the image receiver comprises a radiographic film, a photostimulable phosphor or a digital radiographic detector (title).

Allowable Subject Matter

Claims 9 and 27-28 are allowed over prior art.

Claims 6-7, 15, 19 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior art teaches or suggests a detector for detecting, while the image receiver is in a horizontal posture at a side of the top plate, an obstacle present below the image receiver; wherein the descending operation of the vertical moving mechanism is limited based on the detection result of the detector, a shock absorbing member positioned between the top plate and the image receiver for avoiding direct collision therebetween, in a case in which said top plate is moved toward said image receiver, not being in a horizontal posture, in the horizontal direction or in a case in which the posture of said image receiver is changed from a horizontal posture while said top plate is positioned within a predetermined range in the horizontal direction, a lock mechanism for preventing said image receiver from moving in the horizontal direction when said top plate is positioned within a predetermined range in the horizontal direction and said image receiver is not in a horizontal posture.

Response to Arguments

Applicant's arguments filed on September 5, 2002 have been fully considered but they are not persuasive.

In response to applicant's argument that Ohlson (US 5764724) fails to describe or suggest "limiting means for limiting action of the second moving mechanism in accordance with the position of the image receiver relative to the top plate and or the posture of the image receiver", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, since Ohlson clearly teaches every limitations and the limiting means (telescopic legs which could be operated by operator), one having ordinary skill in the art or the operator would not lower or position the patient table with telescopic legs in accordance with the position of the image receiver when the image receiver is positioned above the patient's lap or any part of the body part in order to prevent damage to the image receiver and/or more importantly for the safety of the patient. Accordingly, since this is an apparatus claim, Ohlson's limiting means would provide the claimed function if there were proper method of use or separate apparatus such as a detector for the method described above.

Furthermore, the word "means" is preceded by the word(s) "limiting" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967). In this case limiting means is clearly taught by Ohlson's telescopic legs and does not provide any function of "detecting" of posture of the image receiver.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon K Song whose telephone number is 703-308-2736. The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

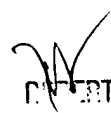
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-4858 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Hoon K. Song
December 11, 2002


ROBERT H. KIM
SUPERVISOR
TECHNOLOGY CENTER